

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,247	12/27/2001	Nobuji Suzuki	NIS-12830	9442
40854	54 7590 10/21/2004 EXAM			INER
RANKIN, HI 4080 ERIE ST	ILL, PORTER & CLA	ELKASSAF	ELKASSABGI, HEBA	
WILLOUGHBY, OH 44094-7836			ART UNIT	PAPER NUMBER
			2834	
			DATE MAILED: 10/21/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/034,247	SUZUKI ET AL.			
		Examiner	Art Unit			
		Heba Elkassabgi	2834			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
THE - External after - If the control of the contro	ORTENED STATUTORY PERIOD FOR REPLEMAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a replement of the period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statut reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be ti oly within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)🛛) Responsive to communication(s) filed on 15 July 2004.					
		s action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
5)⊠ 6)⊠ 7)□	 4) Claim(s) 5-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 5 and 6 is/are allowed. 6) Claim(s) 7-9 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Applicati	ion Papers					
9)	The specification is objected to by the Examin	er.				
10)	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority ι	ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachmen	t(s)					
	e of References Cited (PTO-892)	4) Interview Summary	· ·			
3) 🔯 Inforr	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date <u>07/19/04</u> .	Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	Patent Application (PTO-152)			

Application/Control Number: 10/034,247

Art Unit: 2834

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 07/13/04 has been considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7 -9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirohiko et al. (J.P. Patent 10-128692).

Hirohiko et al. discloses in figure #2 a motor two rotational position detecting sensor-equipped motors each including a motor stators (310/610) and a motor rotors (320/620), a revolving shafts (S1/S2) to which a motor rotor (320/620) is coupled, a bearing structure (130/160,230/240) for rotatably supporting a revolving shaft (S1/S2), and a rotational position detecting sensor (4110/7110) for detecting a rotational position of a revolving shaft (S1/S2). The rotational position detecting sensor equipped motors are combined with each other so as to permit revolving shafts (S1/S2) to be concentric with each other. A motor frame (MF) including first and second side walls (140) that are fixed on both sides in an axial direction of a fixing shaft (S1/S2); a first revolving shaft

Application/Control Number: 10/034,247

Art Unit: 2834

(S1) and a second revolving shaft (S2) positioned between a first side wall and second side wall (SW) and arranged concentrically with a fixing shaft (S1/S2) through a first bearing structure (130/160) and a second bearing structure (230/240). The first and second revolving shafts (S1/S2) are arranged so as to be aligned with each other in the axial direction. The first and second rotation frames (140/170) are fixed on a first and second rotation shafts (S1/S2). Respectively; a first rotational position detecting sensor (4110) including a first sensor rotor (42) provided on the first revolving shaft (S1) and first rotation frame and a first sensor stator (310) arranged on a first side wall so as to correspond to a first sensor rotor (40) and functioning to detect a rotational position of a first revolving shaft (S1); a first motor section including a first motor rotor (320) provided on the other of a first revolving shaft (S1) and first rotation frame and a first motor stator (61) provided on first side wall so as to correspond to a first rotor (42) and functioning to apply rotational force to a first revolving shaft (S1); a second rotational position detecting sensor (7110) including a second sensor rotor (70) provided on one a second motor revolving shaft (S2) and rotation frame (170) and a second sensor stator (610) provided on a second side wall so as to correspond to a sensor rotor (70) and functioning to detect a rotational position of a second revolving shaft (S2); a second motor section including a second motor rotor (70) provided on the other of a second revolving shaft (S2) and second rotation frame (170) and a second motor stator (610) provided on a second side wall so as to correspond to a second motor rotor (70) and functioning to apply rotational force to a second revolving shaft (S2); a first bearing structure (130/160), and a first revolving shaft (S1). One of the first rotational position

Application/Control Number: 10/034,247

Art Unit: 2834

detecting sensor (4110) and first motor section (140), and the other of a first rotational position detecting sensor (4110) and first motor (140) being arranged so as to be aligned with each other outwardly in a radial direction of a fixing shaft (S1), resulting in constituting a first rotational position detecting sensor-equipped motor with a second bearing structure (230). The second revolving shaft (S2), one of a second rotational position detecting sensor (7110) and second motor section (170). The second rotational position detecting sensor (7110) and second motor (170) are arranged so as to be aligned with each other outwardly in a radial direction of a fixing shaft (S2), resulting in constituting a second rotational position detecting sensor-equipped motor. A first output plate (34) arranged so as to extend outwardly in a radial direction of first revolving shaft (S1) from a space defined between first rotational position detecting sensor-equipped motor and a second rotational position detecting sensor-equipped motor. A first output plate (34) is fixed on a first revolving shaft (S1) of a first rotational position detecting sensor-equipped motor and a first rotation frame, to thereby be rotated with a first revolving shaft (S1); and a second output plate (64) arranged so as to extend outwardly in a radial direction of a second revolving shaft (S2) from the space. The second output plate (64) is fixed on a second revolving shaft (S2) of a second rotational position detecting sensor-equipped motor and a second rotation frame, to thereby be rotated with a second revolving shaft (S2).

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Independent claim 5 is allowed over the prior art, which does not disclose a bearing bushing that is arranged concentrically with on revolving shaft and a fixed motor frame on combination.

Dependent claim 6 is allowed for being dependent upon allowable claim 5.

Response to Arguments

Applicant's arguments filed 07/15/04 have been fully considered but they are not persuasive. Hirohiko et al. discloses in the provided English translation which revolving shafts, rotational frame and output plates as claimed and disclosed above in the rejection. It is clearly disclosed based on the claim language that Hirohiko et al. does show the combined structure of the first and second revolving revolving shafts, revoving frames, and the and the output plates.

In response to applicant's arguments that applicant's structure has fewer parts, more economical, and can be used in applications with a limited amount of space is irrelevant.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2834

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DANG LE PRIMARY EXAMINER

HebayY. Elkasşabgi

10/18/04